

National Digital Forecast Database (NDFD) Experimental Graphic Forecast Displays Product Description Document (PDD) 03/15/06

Part I - Mission Connection

- a. Description of Product – The National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS) National Digital Forecast Database (NDFD) Experimental Graphic Forecast Displays (<http://weather.gov/forecasts/graphical/sectors/index.php>) are web-based presentations of digital forecast data originating from local Weather Forecast Office (WFO) digital databases and the NDFD server. The data are displayed in a mosaic form on national and regional scales.

Experimental graphic elements available in NDFD (and the associated comment/feedback periods) for the coterminous United States (CONUS) and Puerto Rico are shown in Table 1 below.

Graphic Element	Comment Open Date	Comment Close Date
Quantitative Precipitation Forecasts (QPF)	6/13/03	9/15/05
Significant Wave Height	6/13/03	9/15/05
Sky Cover	6/13/03	9/15/05
Snow Amount (CONUS only)	6/13/03	9/15/05

Table 1. NDFD Experimental Graphic Elements (CONUS and Puerto Rico) and Associated Comment/Feedback Period.

Experimental graphic elements available in NDFD (and the associated comment/feedback periods) for Hawaii, and Guam are shown in Table 2 below.

Graphic Element	Comment Open Date	Comment Close Date
Significant Wave Height	9/14/04	9/15/05
Sky Cover	9/14/04	9/15/05
Snow Amount (Hawaii only)	9/14/04	9/15/05

Table 2. NDFD Experimental Grid Elements (Hawaii and Guam) and Associated Comment/Feedback Period.

Depending upon the element, forecast time projections will extend out to a maximum of 168 hours. Additional data fields having greater temporal and spatial resolution will be added as the NDFD matures.

Unique local scale products are not covered under this Product Description Document (PDD). For PDDs describing unique local experimental graphic forecast displays not

covered by this PDD, please use the following links:

Eastern Region:	http://products.weather.gov/PDD/ERNDFDGraphics.pdf
Southern Region	TBD
Central Region:	TBD
Western Region:	TBD
Pacific Region:	TBD
Alaska Region:	TBD

For more information on the NDFD, please refer to the NDFD Information web site at the following URL: <http://www.nws.noaa.gov/ndfd/index.htm>

- b. Purpose - NDFD is a high resolution data set in non-displayable form. In support of the mission described in the *National Weather Service Strategic Plan for FY2003 - FY 2008*, the NDFD is a "...national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community." Graphic displays of these data are primarily required by NWS forecasters needing to view a composite of the collective forecast efforts, as well as emergency managers who require rapid visual forecast information to help make critical decisions. Once these graphic displays are created, they must also be made available to the general public. The NDFD graphic forecasts fulfill additional NWS objectives for improving the accessibility and availability of weather information to the public. Future graphic mosaic displays will be developed in accordance with growing user needs.
- c. Intended Audience - The NWS graphic forecasts are intended for government emergency managers, academia, businesses, and anyone in the general public who needs to view the content within the NWS digital forecast databases. While the data are available in digital form, many NWS customers cannot interpret or use these digital data unaided. For those who cannot, a graphic presentation is the most efficient means to communicate the large amount of information originating from NWS WFOs.
- d. Presentation Method - The data are presented as web-based graphic images. The NDFD National mosaic provides weather forecast information for the entire coterminous United States (CONUS) and U.S. territories outside the coterminous United States (OCONUS) including Hawaii, Guam, and Puerto Rico/Virgin Islands. In the future, geographical data sectors will also be available for Alaska.

The graphic forecast displays follow a standard format prescribed by the NWS to best meet the needs of its customers and partners. When selected by the user (via a mouse click on the national mosaic), regional mosaics provide images for 16 predefined and slightly overlapping geographic sectors throughout the CONUS, as depicted at the following URL: <http://www.weather.gov/ndfd/coverage.htm>. Three OCONUS sectors are also available for Hawaii, Guam, and Puerto Rico/Virgin Islands. For the CONUS, an additional mouse click will drill down to graphics for each state. One final mouse click will zoom to individual WFO County Warning and Forecast areas. Most OCONUS

sectors also have limited zoom capability. For each geographic level of display, the user may select the weather element and time period to display, and create animations of the images.

- e. Feedback Mechanism - We are always seeking to improve our products based on user feedback. Please submit your comments on these experimental elements by completing our brief [experimental product survey](#) during the comment period specified for the individual graphic shown in Tables 1 or 2 above. Comments may also be submitted by clicking on the “Survey/Comments” links on the experimental product web pages. For general questions regarding the National Digital Forecast Database, please email: nws.ndfd@noaa.gov

Technical questions regarding the NDFD graphics may be addressed to:
National Weather Service Headquarters
ATTN: David Ruth, W/OST21
1325 E-W Highway, SSMC2
Silver Spring, MD 20910

Part II - Technical Description

- a. Format & Science Basis - The NDFD forecast element definitions and technical information (e.g., temporal and spatial resolutions of the graphics, and geographic coverage) may be found on the NDFD technical page at the following URL:
<http://www.nws.noaa.gov/ndfd/technical.htm>
- b. Product Availability - The NDFD web-based graphic mosaics are continuously by accessing the main National Weather Service homepage, www.weather.gov, and clicking on the “Graphical Forecasts” tab, or directly at the following URL:
<http://weather.gov/forecasts/graphical/sectors/index.php>

Forecast grids are revised at the local WFOs on an event-driven basis. The revised grids are uploaded to the NDFD server and new graphic mosaics are generated at the top of each hour. At a minimum, revised mosaics will be refreshed daily no later than 1800 Coordinated Universal Time (UTC).

- c. Additional Information - National Weather Service Instruction (NWSI) 10-506, Digital Data Products/Services Specification provides detailed information on both experimental and operational elements in NDFD.
 - (1) Experimental graphic elements are differentiated from NWS operational elements by the “experimental” label found on the individual graphics.
 - (2) Experimental graphic elements are evaluated on both objective (e.g., statistical data) and subjective (e.g., internal and external feedback) criteria. If they are declared “operational,” they are removed from this PDD for experimental elements.